

Appl. No. : 09/713,479
Filed : November 15, 2000

REMARKS

The December 22, 2004 Office Action was based upon pending Claims 1-11, 19-25, 30, 32-38, 40, 41 and 49.

The Examiner rejected Claims 1-11, 19-25, 30, 32-38, 40, 41 and 49 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent 6,519,613 to Friske, et al. ("the Friske patent") in view of U.S. Patent No. 6,363,387 to Ponnekanti et al. ("the Ponnekanti patent").

In light of the arguments set forth below, Applicant respectfully requests allowance of the pending claims.

Rejection of Claims 1-11, 19-25, 30, 32-38, 40, 41 and 49 under 35 U.S.C. § 103

In the December 22, Office Action, the Examiner rejected Claims 1-11, 19-25, 30, 32-38, 40, 41 and 49 under 35 U.S.C. § 103 as being unpatentable over the Friske patent in view of the Ponnekanti patent. In view of the above claim clarifications and the following discussion, Applicant respectfully traverses this rejection.

Partial Locking

Generally speaking the Friske patent appears to describe a system that reorganizes a database by making a copy of the unorganized database. During this reorganization process, data requests send to the unorganized database do not appear to be blocked. For example, the Friske patent states:

"Following a reorganization request, a "non-blocking" drain in task 404 places a lock on a new target data set contained in the database 122. The non-blocking drain does not acquire a "traditional" lock on the target data set, wherein a lock is generally understood to be a serialization mechanism by which a data set is restricted for use only by the holder of the lock. With the non-blocking drain, any requests to access the target data set will not be blocked although the sequence in which a lock was requested is still recorded. This allows other processes that need to use the target data set to access the data set even when the reorganization process is taking place." Column 6, lines 56-67 of the Friske patent.

That is, the Friske patent does not appear to describe a system that performs of blocking of the original table during reorganization let alone partial blocking. As stated by the Examiner, the Friske patent does not appear to describe a partial locking system

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wherein certain data transactions are blocked while others are allowed on the original table during reorganization.

The Ponnekanti patent also does not appear to describe a partial locking system wherein certain data transactions are blocked while others are allowed during reorganization. The reference made by the Examiner to column 10, lines 31-33 do not appear to provide a partial locking system during reorganization of a database. Rather, this text appears to be directed to simply locking rows or pages of data.

Furthermore, the Ponnekanti patent teaches away from using a partial lock during the reorganization of a database. For example, column 10, lines 46 to 51 of the Ponnekanti patent refers to a reorganization utility. This portion of the specification, however, describes a reorganization utility that applies an exclusive table lock during reorganization. Thus, the Ponnekanti patent does not appear to describe the concept of allowing certain transactions while blocking others during reorganization.

Thus, neither the Friske patent nor the Ponnekanti patent, either alone or in combination, teach Applicant's unique system for partially blocking certain transactions while allowing others during the reorganization of an object or database.

Accessibility During Substitution of the Reorganized Data

Furthermore, the Friske patent does not appear to describe a system where the data remains accessible during the substitution of the reorganized database with the original database. For example, in the Friske patent, the unorganized database and the reorganized database are temporarily inaccessible while the reorganized database is substituted for the unorganized database:

"The preferred method of the present invention may be practiced on both compressed and uncompressed data sets as shown in task 420. If the target data set does not comprise compressed data, the processor 106 replaces the original logical data set with the reorganized target data set in task 422, which is used to reorganize the physical database 122. Briefly during this replacement step, neither the original nor the reorganized data is accessible by a process request. After the reorganization of a database has occurred, the method ends in task 426. Column 9, lines 10-19 of the Friske patent (emphasis added).

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Thus, the Friske patent also does not teach a system where the data remains accessible during the substitution of the reorganized database with the original database.

The Ponnekanti patent, also does not describe a system where the data remains accessible during the substitution of the reorganized database with the original database. Rather, the Ponnekanti patent, appears to describe a system that exclusively locks a table during reorganization. That is, the Ponnekanti patent doesn't appear to teach the concept of substituting a reorganized table with an original table, let alone allowing access during substitution.

Thus, neither the Friske patent nor the Ponnekanti patent, either alone or in combination, teach Applicant's unique system for allowing access during substitution of the reorganized database with the original database.

Independent Claim 1

Applicant has amended independent Claim 1 to clarify that the reorganized table remains accessible while substituting the reorganized table for the original table. In light of the arguments stated above, Applicant submits that Claim 1 is now in condition for allowance.

Dependent Claims 2-11

Claims 2-11 which depend from Claim 1, are believed to be patentable for the same reasons articulated above with respect to Claim 1 and because of the additional features recited therein.

Independent Claim 19

Applicant has amended independent Claim 19 to clarify that the reorganized object remains readable while substituting the reorganized object for the original object. In light of the arguments stated above, Applicant submits that Claim 19 is now in condition for allowance.

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Dependent Claims 20 and 21

Claims 20 and 21 which depend from Claim 19, are believed to be patentable for the same reasons articulated above with respect to Claim 19 and because of the additional features recited therein.

Independent Claim 22

Applicant has amended independent Claim 22 to clarify that the reorganized object remains readable while substituting the reorganized object for the original object. In light of the arguments stated above, Applicant submits that Claim 22 is now in condition for allowance.

Dependent Claims 23-25

Claims 23-25 which depend from Claim 22, are believed to be patentable for the same reasons articulated above with respect to Claim 22 and because of the additional features recited therein.

Independent Claim 30

Applicant has amended independent Claim 30 to clarify that the reorganized table remains readable when the reorganization application substitutes the reorganized table for the table. In light of the arguments stated above, Applicant submits that Claim 30 is now in condition for allowance.

Independent Claim 32

Applicant has amended independent Claim 32 to clarify that the reorganized object remains readable when substituting the reorganized object for the original object. In light of the arguments stated above, Applicant submits that Claim 32 is now in condition for allowance.

Dependent Claims 33 and 34

Claims 33 and 34 which depend from Claim 32, are believed to be patentable for the same reasons articulated above with respect to Claim 32 and because of the additional features recited therein.

Independent Claim 35

Applicant has amended independent Claim 35 to clarify that reorganized object remains readable when substituting the reorganized object for the original object. In

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light of the arguments stated above, Applicant submits that Claim 35 is now in condition for allowance.

Dependent Claims 36-38

Claims 36-38 which depend from Claim 35, are believed to be patentable for the same reasons articulated above with respect to Claim 35 and because of the additional features recited therein.

Independent Claim 40

Applicant has not amended independent Claim 40 as this claim is directed to execution thread applies a partial lock that allows read-only access to the data during the substitution of the reorganized object for the original object while blocking other access to the data. In light of the arguments stated above, Applicant submits that Claim 40 is in condition for allowance.

Dependent Claims 41 and 49

Claims 41 and 49 which depend from Claim 40, are believed to be patentable for the same reasons articulated above with respect to Claim 40 and because of the additional features recited therein.

Conclusion

Applicant has endeavored to address all of the Examiner's concerns as expressed in the outstanding Office Action. In light of the above remarks, reconsideration and withdrawal of the outstanding rejections is specifically requested.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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Dated: 3/21/05

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